

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

82580

REGION 2 290 BROADWAY NEW YORK, NY 10007-1866

NOV 1 2 2002

Kent H. Garson Curtiss-Wright Corporation 1200 Wall Street West Suite 501 Lyndhurst, New Jersey 07071

Dear Mr. Garson:

This is in response to your letter of November 5, 2002, regarding the U.S. Environmental Protection Agency's (EPA's) request for information pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. Section 9601 et seq., in the matter of the Berry's Creek Study Area (the "Study Area"), Bergen County, New Jersey, October 16, 2002.

EPA concurs that the Curtiss-Wright Corporation site at 1 Passaic Street, Wood-Ridge, New Jersey is not within the Study Area as defined in EPA's information request. However, please note that several of the questions in EPA's information request are intended to address whether the Curtiss-Wright Corporation or any of its predecessors or subsidiaries ever transported or arranged for the transportation of hazardous wastes for treatment, storage or disposal within the Study Area. In this regard, I reference, in particular, Questions 15, 8 and 12. Therefore, you must submit a response that substantially addresses all matters related to these questions.

As a point of clarification with regard to a statement in your letter, please note that EPA has not at this time named the Curtiss-Wright Corporation as a Potentially Responsible Party (PRP) under CERCLA in the matter of the Berry's Creek Study Area.

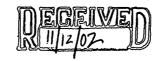
Thank you for your cooperation in responding to EPA's information request. If you have any questions, please contact me at (212) 637-4976.

Sincerely,

Seth Ausubel

Remedial Project Manager

New Jersey Remediation Branch



November 6, 2002

Seth Ausubel
Remedial Project Manager
United States Environmental Protection Agency
Region II
Emergency and Remedial Response Division
290 Broadway, 19th Floor
New York, NY 10007-1866

Subject: Berry's Creek Study Area



493 Washington Avenue P.O. Box 437 Carlstadt, NJ 07072 201/438-9190 212/564-5541 Fax # 201/438-3356

Pursuant to your instructions, here is our response to your questioner as follows:

- 1.
- A. Components & Controls, Inc. P.O. Box 437 Carlstadt, NJ 07072
- B. "C "Corporation
- C. Jerry Orlando, President, Secretary & Treasurer
- D. No other affiliates
- E. NJ Corporation October 1972, Agent Jerry Orlando
- F. Not a successor to any other company
- 2. The site noted as 491 Washington Avenue Carlstadt was occupied from July 1976 through May 1987. The building was 8,500 square feet of cinder block construction. This property was leased from Jomike Corp. Location noted as part of Block 152 lot 76. Our current location is next door to 491 Washington Avenue and is now 493 Washington Avenue Carlstadt. Location noted as part of block 128 Lot 32. This property is also leased from Jomike Corp.
- 3. The company's business function has been primarily a manufacturer's Distributor, representative and sales office while located at 491 Washington Avenue. This continued at 493 Washington Avenue with the addition of on hose assembly in October1990. Our primary function is still distribution and sales.
- 4. The 491 Washington Avenue site was leased from July 1976 through May 1987. The 493 Washington Avenue site has been occupied from May 1987 through the present.
- 5. The 491 Washington Avenue site was originally a contractor's storage yard, warehouse and executive offices. The 493 Washington Avenue site was formerly a watch company where time pieces where distributed and repaired.

- 6. The 491 Washington Avenue site from 1976 through 1987 was used as a sales office and stocking location for industrial hardware (instrument valves and fittings). All material was maintained in manufacturers packaging and resold to industrial consumers. The 493 Washington Avenue site is used in the same manner except in October of 1990 we added hose assembly services. This continues today.
- 7. We ceased operation at the 491 Washington Avenue site May 1987. The reason was because we needed more office and warehouse space. The adjacent building 493 Washington Avenue became available to us.
- 8. We did not generate hazardous waste at the 491 Washington Avenue site. Our current location generates very small quantities of waste (25 gallon aqueous solvent tank), which is removed and replenished by Safety Clean every three months.
- 9. We have no local or state permits regarding waste disposal. All waste material is being submitted to Safety Clean for disposal.
- 10. Hazardous substances include Oakite 31 15 gals. Simple Green 4 gals.
- 11. Oakite 31 1/4 gal. is used to clean hose end fittings. Simple Green approximately 4 gallons diluted in 15 gallons of water is also used to clean hoses. Waste Oakite 31 and Simple Green are each collected in separate 15-gallon drums and are removed by Safety Clean when a total of 15 gallons of product is present.
- 12. The waste material for the solvent tank is removed every three months by safety Clean. Safety Clean removes the Oakite 31 and the Simple Green waste when we accumulate approximately 15 gallons. It takes approximately two to four years to accumulate 15 gallons of each because of minimal usage.
- 13. The shop foreman notifies the Safety Clean driver when he has a 15-gallon drum filled and ready for disposal.
- 14. We have not been involved in CERCLA or RCRA.
- 15. When the owner of 491 Washington Avenue (Jomike Corp. 84 Johnson Dr. Hackensack, NJ 07601) started expansion in 1986, the contractor excavating the footings discovered gasoline present in a leaching field from an old decommissioned septic system. Components & Controls, Inc. occupied the building after the septic system was decommissioned. Jomike Corp. the owner of the property took care of all cleanup at the time under EPA supervision.
- 16. Page 5 is answered to the best of our knowledge.



- 17. No customer products stored at this or any other location.
- 18. N/A
- 19. Additional documents enclosed.
- 21. Jerry Orlando, John Sheehan and Israel Acosta.
- 22. Leases, Safety Clean documents and material data sheets.

If you should need any additional information, please do not hesitate to contact me.

Yours truly,

COMPONENTS & CONTROLS, INC.

Jerry Orlando President

Cc: Clay Monore

Assistant Regional Counsel Office of Regional Counsel 290 Broadway, 17th Floor New York, NY 10007-1866

Enc.



Request for Information Regarding Chemical Releases to the Berry's Creek Study Area

<u>Instructions</u>: As instructed in Question 16, please complete this form by marking the appropriate spaces. Indicate whether each of the chemicals listed has ever been released from the Site to the Berry's Creek Study Area, including creeks, ditches, or other water bodies, or wetlands. Follow additional instructions below. Return the completed form along with your other responses to the Request for Information in the Matter of the Berry's Creek Study Area, Bergen County, New Jersey. N/A signifies no information available.

	Yes	No N	AI
acenaphthene		X	
acenapthylene		Y	
anthracene	٠,	X	
aluminum 🛴 🔭		3 L	
antimony			
arsenic		<i>y</i> .	
benz(a)anthracene			
benzene		7.	
benzo(a)pyrene		X	
benzo(b)fluoranthene		Y	
benzo(g,h,i)perylene			
benzo(k)fluoranthene		<i>y</i> .	
bis(2-ethylhexyl)phthalate		X	
butyl benzyl phthalate		7	
cadmium		X	
chlorinated dibenzo-p-dioxins (if			
"yes", please list specific dioxin compounds on a separate sheet).		X-1	
chlorinated dibenzofurans (if	10.000.02		
"yes", please list specific		İ	
compounds on a separate sheet)		X	
chlorobenzene	1-		
chloroform		X	G. Addison in
chromium		1	
chrysene		L X L	
copper		*	
cyanide		X	
dibenz(a,h)anthracene		- X	
dichlorobenzene		X	***********
1.2-dichloroethene		ALL	
di-n-butyl phthalate			
1,2-dichlorobenzene 1,2-dichloroethane			i
dieldrin –			
di-n-octyl phthalate			
ethylbenzene			
fluoranthene		7	
<u> </u>			

· · · ·	Ves	'No	N/A
fluorene	4 05	Х	
vhexachlorob e nzene		X	
indeno(1,2,3-cd)pyrene		Y	*********
lead the second second second		¥.	
manganese		×	
mercury ***		. 7	
methylene chloride		×	
methyl ethyl ketone		X	
methyl mercury		X	
2-methylnaphthalene		X	
naphthalene		X	
nickel has a second			
pentachlorophenol		Χ.	
petroleum hydrocarbons		, X	
phenanthrene		X	
phenol polychlorinated biphenyls (if "yes"		±)(
please list specific congeners and			
aroclors on a separate sheet)		\searrow	
polycyclic aromatic hydrocarbons			
(if "yes", please list specific	100		
compounds on a separate sheet, if ?		1,	100
not listed on this page)			
pyrene		-X	
selenium silver		_ <u>/</u> _	
1,1,2,2-tetrachloroethane.		X	
tetrachloroethylene			
thallium		X	
toluene		Y	
-1,2-trans dichloroethylene		Ŷ	
1,1,1-trichloroethane		Ľ	
irichloroethylene		¥	
vinyl chloride	AND AND TO SHAPE SHAPE SHAPE	X	
xylene		¥.	67.4
zinc		X	

TERRY ORLANDO Name of person completing form COMPONENTS & CONTROLS
Company

Site (as defined in the "Instructions")



SAFETY-KLEEN SAMPLE ANALYSIS REPORT Prequalification TCLP Report

SAMPLE DESCRIPTION:

ACCEPT FOR SHIPMENT

PAGE 1

SK AQUEOUS SOLUTION

REPORT DATE: 05-08-98

S-K REPRESENTATIVE: MIKE FLYNN

CONTROL #: 1803177-7

BRANCH #: 211801

SURVEY #: 1103522

CUSTOMER#:

LAB#: 9803177

Generator: COMPONENTS & CONTROLS

493 WASHINGTON AVE CARLSPAST, NJ 07072

Attention: JOHN E SHEEHAN

The enclosed TCLP Analysis and/or suitable generator knowledge as applied to your company on the sample in question DOES NOT SHOW any TCLP Characteristic Waste Code.

For the material to be classified as non-hazardous, the generator must determine that the waste is not defined as a "listed" hazardous waste, not mixed with a "listed" hazardous waste, not derived from a "listed" hazardous waste, and obtain adequate information pertaining to the hazardous characteristics of:

> Ignitability Corrosivity

Waste Code D001

Waste Code D002

Reactivity -

Waste Code D003

TCLP Toxicity

Waste Codes D004 - D043

reviewed and accepted for shipment.

A Safety-Kleen representative will be contacting you with further detail regarding the shipping, handling, and processing of your material.

If you have any questions regarding the above analysis, please contact Customer Service at (773)825-7338.

Continued on next page

PAGE 2 COMPONENTS & CONTROLS

																					I	

EPA Waste# Analyte	Date Analyzed	EPA SW846 Method	TCLP Reg Limit mg/L	Result mg/L
D023 2-Methylphenol	05-01-98	8270	200	< 0.125
D024/25 3+4-Methylphenol	05-01-98	8270	200	<0.225
D030 2,4-Dinitrotoluene	05-01-98	8270	0.13	< 0.025
D032 Hexachlorobenzene	05-01-98	8270	.0.13	<0.100
D033 Hexachlorobutadiene	05-01-98	8270	0.5	< 0.100
D034 Hexachloroethane	05-01-98	8270	3	< 0.075
D036 Nitrobenzene	. 05-01-98	8270	2	< 0.250
D037 Pentachlorophenol	05-01-98	8270	100	< 0.475
D038 Pyridine	05-01-98	8270	5	< 0.150
D041 2,4.5-Trichlorophenol	05-01-98	8270	400	< 0.125
D042 2,4,6-Trichlorophenol	05-01-98	8270	2	< 0.075

METALS IN TCLP LEACHATE

EPA Waste # Analyte	Date Analyzed	EPA SW846 Method	TCLP Reg mg/I	Limit Result mg/L
D004 Arsenic	04-28-98	6010	5	<5.00
D005 Barium	04-28-98	6010	100	0.776
D006 Cadmium	04-28-98	6010	1	< 0.500
D007 Chromium	04-28-98	6010	5	<0.500
D008 Lead	04-28-98	6010	5	<4.00
D009 Mercury	04-29-98	7471	0.2	<0.040
D010 Selenium	05-04-98	7740	1	< 0.45
D011 Silver	04-28-98	6010	5	< 0.500

VOLATILE ORGANICS IN TELP LEACHATE

EPA Waste # Analyte	Date Analyzed	EPA SW846 Method	TCLP Reg Limit mg/L	Result mg/L
D018 Benzene	04-29-98	8240	0.5	< 0.100
D019 Carbon Tetrachloride	04-29-98	8240	0.5	< 0.100
D021 Chlorobenzene	04-29-98	8240	, 100	< 0.100
D022 Chloroform	04-29-98	8240	6	<0.100
D027 1,4-Dichloroben ene	04-29-98	8240	7.5,	< 0.100
D028 1,2-Dichloroethane	04-29-98	8240	0.5	<0.100
D029 1,1-Dichloroethylene	04-29-98	8240	0.7	< 0.100
D035 Methyl Ethyl Ketone	04-29-98	8240	200	< 0.500
D039 Tetrachloroethylene	04-29-98	8240	0.7	< 0.100
D040 Trichloroethylene	04-29-98	8240	0.5	< 0.100
D043 Vinyl Chloride	04-29-98	8240	0.2	<0.140

Control #: 1803177-7 Survey #: 1103522

ACCEPT FOR SHIPMENT

PAGE 4

COMPONENTS & CONTROLS

Sample Description:

SK AQUEOUS SOLUTION

SAMPLE HANDLING DATES

Date Sampled:

04-22-98

Date Received:

04-24-98

SAMPLE COMPOSITION

Number of Phases:

-1.

Percent Solids (Method 1311):

0.13%

Percent Dry Solids (Method 1311):

0.13%

LEACHING/EXTRACTION DATES

Method

<u>Date</u>

Bottle Leach:

1311

Not Required

ZHE Leach:

1311

Not Required

BNA Extraction:

Not Required

The analysis contained herein are performed to provide Safety-Kleen Corp. and its customers a means of determining compliant waste handling practices that are consistent with applicable permits and processing capability.



SAFETY-KLEEN SAMPLE ANALYSIS REPORT Prequalification TCLP Combination Report

Fluid Recovery Services

STATUS.

RECEIVED: 4/28/98

COMPLETED: 15/4/98

REVISED: 5/7/98

S-K REPRESENTATIVE: Michael Flyer

ACCEPT FOR

REPORT DATE: 5/8/98

BRANCH/ARM #: 211801

SHIPMENT

CONTROL #: 1811365-8

4/22/98

SURVEY #: 1103522. **LAB #:** 9811365

SAMPLE DESCRIPTION: SK Aqueous Solution

Nature of Business: None Given

S.I.C.:

Status:

Facility Address:

493 Washington Ave Carlspast, NJ 07072

Billing Address:

Process Description:

Material Description:

Cleaning Of Parts SK Aqueous Solution 30 Gallons Quarterly

Generation Amount: Gallons On Hand:

P.O. #: Contact:

John E Sheehan

Date Survey Signed:

Title: Inside Sales

Phone: (201)438-9190

Survey Comments: Model 91 With Aquaworks

The analysis contained herein are performed solely for the purpose of qualifying the analyzed materials for acceptance by Safety-Kleen Corp. in accordance with its permits and processing capability.

Control #: 1811365-8 Survey #: 1103522

ACCEPT FOR SHIPMENT

PAGE 4 Components & Controls

CORPORATE REVIEW

Disposition:

Accept for shipment

Review Date:

5/6/98

Part Number: 87174 Waste Water

Reviewers:

.CAP

APPROVED FACILITIES:

Safety-Kleen Corp.

1722 Cooper Creek Road

FED EPA Number State EPA Number TXD077603371

Telephone

817-383-2611

65124

Denton, TX 76208

State Authorization

Additional Description:

Safety-Kleen Corp.

1200 Sylvan Street

FED EPA Number State EPA Number NJD002182897

Telephone

908-862-2000

State Authorization

Additional Description:

Safety-Kleen Corp.

Linden, NJ 07036

3700 LaGrange Road

FED EPA Number

KYD053348108

State EPA Number

Telephone

502-845-2453

Smithfield, KY 40068

State Authorization

Additional Description:

APPROVED DOT - SHIPPING DESCRIPTION

SKDOT #: 0005468

water

(not USDOT or USEPA Hazardous material)

State/Prov. Codes:

NJ ID72

TX: OUTS1191

US EPA Waste Codes: NONE

REVIEW COMMENTS

OK for waste water fuel. Waste shipped in drums from the customers site need to be equipped with a bung in the top lid prior to shipment. Drums received from the customer lacking bungs will be returned to the customer by the SK TSDF.

Proper shipping description was based on this single analysis. Generator must certify that shipment is not hazardous. Per company policy, FRS customers must complete Generator Certification with each shipment and branch will file in customer records

A Generator Waste Determination Certification form for USEPA non-hazardous waste approval has been received.

no telp characteristics per telp 9803177.

This serves as notice per federal and state regulations that each facility noted above has the appropriate permits, capabilities, capacity; and is willing to accept the material as described in the approval section. It is the responsibility of the generator to notify Safety-Kleen Corp. of any changes in the process generating this waste stream.

Control #: 1811365-8 Survey #: 1103522

ACCEPT FOR SHIPMENT

PAGE 5 Components & Controls

GENERAL ANALYSIS

Phase:

TOTAL

<u>Parameter</u>	Date Analyzed	Result	Units
Water Compatibility	4/28/98	Compatible	
pH by Meter Direct	4/28/98	10.7	
Water Content	4/28/98	85	wt.%
Viscosity	4/28/98	<50	cps
Color	4/28/98	LT YELLOW	•
Radioactivity	4/28/98	None Detected	
Bulk Density	4/28/98	0.98	
Flammability at 73 F	4/29/98	No Flash	
Flammability at 140 F	4/29/98	No Flash	
Non-Volatile Residue at 105 C		15	wt.%

Phase:

AQUEOUS

Parameter
Phase % by Appearance

Date Analyzed 4/28/98

Result

Units vol.%

FUEL EVALUATION

Phase:

TOTAL

Heat Content
Ash Upon Combustion

Date Analyzed 4/29/98 4/29/98 Result < 500 5.3

Units Btu/lb

wt.%

VOLATILE ORGANIC COMPOSITION

Phase:

TOTAL

Compound Name

Traces of Volatile Organics Detected

(<1.0% Each)

CAS Number

<u>Result</u> 0.090

Units wt.%

SPECIFIC ORGANIC COMPOSITION

POLYCHLORINATED BIPHENYLS (PCBs):

Compound Name		,			Result	<u>Units</u>
Aroclor 1016	,			-	<1.0	mg/Kg
Aroclor 1221				•	<1.0	mg/Kg
Aroclor 1232			-		<1.0	mg/Kg
Aroclor 1242					<1.0	mg/Kg
Aroclor 1248					<1.0	mg/Kg
Aroclor 1254					<1.0	mg/Kg
Aroclor 1260	-				<1.0	mg/Kg
Aroclor 1262					<1.0	mg/Kg
Aroclor 1268	•			•	<1.0	mg/Kg

Control #: 1811365-8 Survey #: 1103522

ACCEPT FOR SHIPMENT

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Components & Controls

ANALYTICAL SERVICES

Comments: NVR estimated by difference on Total.

MATERIAL SAFETY DATA SHEET: SIMPLE GREEN®

I. PRODUCT & COMPANY INFORMATION

PRODUCT NAME: SIMPLE GREEN® CLEANER / DEGREASER / DEODORIZER Page 1 of 4

COMPANY NAME:

SUNSHINE MAKERS, INC.

Version No. 1007

15922 Pacific Coast Highway

Issue Date: January, 2002

Huntington Harbour, CA 92649 USA

Telephone: 800-228-0709 • 562-795-6000

Fax: 562-592-3034

Website: www.simplegreen.com

For 24-hour emergency, call Chem-Tel, Inc.: 800-255-3924

USE OF PRODUCT: An all purpose cleaner and degreaser used undiluted or diluted in water for direct, spray,

and dip tank procedures.

II. INGREDIENT INFORMATION

The only ingredient of Simple Green® with established exposure limits is undiluted 2-butoxyethanol (<6%) (Butyl Cellosolve; CAS No. 111-76-2): the OSHA PEL and ACGIH TLV is 25 ppm (skin). Note, however, that Butyl Cellosolve is only one of the raw material ingredients that undergo processing and dilution during the manufacture of Simple Green®. Upon completion of the manufacturing process, Simple Green® does not possess the occupational health risks associated with exposure to undiluted Butyl Cellosolve. Verification of this is contained in the independent test results detailed under "Toxicological Information" on Page 3 of this MSDS.

The Butyl Cellosolve in Simple Green® is part of a chemical category (glycol ethers) regulated by the Emergency Planning and Community Right-to-Know Act (SARA, Title III, section 313); therefore, a reporting requirement exists. Based upon chemical analysis. Simple Green® contains no known EPA priority pollutants, heavy metals, or chemicals listed under RCRA, CERCLA, or CWA. Analysis by TCLP (Toxicity Characteristic Leaching Procedure) according to RCRA revealed no toxic organic or inorganic constituents.

All components of Simple Green® are listed on the TSCA Chemical Substance Inventory.

III. HAZARDS IDENTIFICATION

UN Number:

Not required

Dangerous Goods Class:

Nonhazardous

Hazard Rating (NFPA/HMIS)

Health = 1*

Reactivity = 0

Fire = 0

Special = 0



Rating Scale

0 = minimal

1 = slight

2 = moderate

3 = serious

4 = severe

*Mild eye irritant, non-mutagenic and non-carcinogenic. None of the ingredients in Simple Green® are regulated or listed as potential cancer agents by Federal OSHA, NTP, or IARC.

IV. FIRST AID MEASURES

SYMPTOMS OF OVEREXPOSURE AND FIRST AID TREATMENT

Eye contact: Reddening may develop. Immediately rinse the eye with large guantities of cool water; continue 10-

15 minutes or until the material has been removed; be sure to remove contact lenses, if present, and

to lift upper and lower lids during rinsing. Get medical attention if irritation persists.

Skin contact: Minimal effects, if any; rinse skin with water, rinse shoes and launder clothing before reuse.

Reversible reddening may occur in some dermal-sensitive users; thoroughly rinse area and get

medical attention if reaction persists.

Swallowing: Essentially non-toxic. Give several glasses of water to dilute; do not induce vomiting. If stomach

upset occurs, consult physician.

Inhalation: Non-toxic. Exposures to concentrate-mist may cause mild irritation of nasal passages or throat;

remove to fresh air. Get medical attention if irritation persists.

V. FIRE FIGHTING MEASURES

Simple Green® is stable, not flammable, and will not burn.

Flash Point/Auto-Ignition:

Not flammable.

Flammability Limits:

Not flammable.

Extinguishing Media:

Not flammable/nonexplosive. No special procedures required.

Special Fire Fighting Procedures:

None required.

VI. ACCIDENTAL RELEASE MEASURES

Recover usable material by convenient method; residual may be removed by wipe or wet mop. If necessary, unrecoverable material may be washed to drain with large quantities of water.

VII. HANDLING, STORAGE & TRANSPORT INFORMATION

No special precautions are required. This product is non-hazardous for storage and transport according to the U.S. Department of Transportation Regulations. Simple Green® requires no special labeling or placarding to meet U.S. Department of Transportation requirements.

UN Number: Not required

Dangerous Goods Class: Non-hazardous

VIII. EXPOSURE CONTROLS

Exposure Limits: The Simple Green® formulation presents no health hazards to the user when used according to label directions for its intended purposes. Mild skin and eye irritation is possible (please see Eye contact and Skin contact in Section IV.).

Ventilation: No special ventilation is required during use.

Human Health Effects or Risks from Exposure: Adverse effects on human health are not expected from Simple Green®, based upon twenty years of use without reported adverse health incidence in diverse population groups, including extensive use by inmates of U.S. Federal prisons in cleaning operations.

Simple Green® is a mild eye irritant; mucous membranes may become irritated by concentrate-mist.

Simple Green® is not likely to irritate the skin in the majority of users. Repeated daily application to the skin without rinsing, or continuous contact of Simple Green® on the skin may lead to temporary, but reversible, irritation.

Medical Conditions Aggravated by Exposure: No aggravation of existing medical conditions is expected; dermal sensitive users may react to dermal contact by Simple Green®.

SUNSHINE MAKERS, INC.

IX. PERSONAL PROTECTION

Precautionary Measures: No special requirements under normal use conditions.

Eye Protection: Caution, including reasonable eye protection, should always be used to

avoid eye contact where splashing may occur.

Skin Protection: No special precautions required; rinse completely from skin after contact.

Respiratory Protection: No special precautions required.

Work and Hygienic Practices: No special requirements. Wash or rinse hands before touching eyes or contact lenses.

X. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/odor: Translucent green liquid with characteristic sassafras odor.

Specific Gravity: 1.0257 Vapor Pressure: 17 mm Hg @ 20 °C; 22 mm Hg @ 25 °C

pH of concentrate: 9.5 Vapor Density: 1.3 (air = 1)

Evaporation: >1 (butyl acetate = 1) **Density:** 8.5 lbs./gallon **Boiling Point:** 110 °C (231 °F)

Freezing Point: -9 °C (16 °F) If product freezes, it will reconstitute without loss of efficacy when brought back to

room temperature and agitated.

VOC Composite Partial Pressure: 0.006 mm Hg @ 20 °C

Volatile Organic Compounds (VOCs): 7.96 g/L per ASTM Method 3960-90. Per California AQMD's VOC test method, product must be diluted at least 2 parts of water to 1 part Simple Green® in order to meet SCAQMD Rule 1171 & Rule 1122 and BAAQMD Regulation 8-16 VOC requirements for solvent cleaning operations.

Water Solubility: Completely soluble in water. The higher salt concentrations in marine ecosystems will lead to complexes with Simple Green® that may become visible at ratios above one part Simple Green® to 99 parts seawater.

Ash Content: At 600 °F: 1.86% by weight.

Nutrient Content: Nitrogen: <1.0% by weight (fusion and qualitative test for ammonia).

Phosphorus: 0.3% by formula.

Sulfur: 0.6% by weight (barium chloride precipitation method).

Detection: Simple Green® has a characteristic sassafras odor that is not indicative of any hazardous situation.

XI. STABILITY AND REACTIVITY INFORMATION

Nonreactive. Simple Green® is stable, even under fire conditions, and will not react with water or oxidizers. Hazardous polymerization will not occur.

XII. TOXICOLOGICAL INFORMATION

Nonhuman Toxicity

Acute Mortality Studies:

Oral LD_{50} (rat): >5.0 g/kg body weight // Dermal LD_{50} (rabbit): >2.0 g/kg body weight

Dermal Irritation: Only mild, but reversible, irritation was found in a standard 72-hr test on rabbits. A value of 0.2 (non-irritating) was found on a scale of 8.

Eye Irritation: With or without rinsing with water, the irritation scores in rabbits at 24 hours did not exceed 15 (mild irritant) on a scale of 110.

Subchronic dermal effects: No adverse effects, except reversible dermal irritation, were found in rabbits exposed to Simple Green® (up to 2.0 g/kg/day for 13 weeks) applied to the skin of 25 males and 25 females. Only female body weight gain was affected. Detailed microscopic examination of all major tissues showed no adverse changes.

Fertility Assessment by Continuous Breeding: The Simple Green® formulation had no adverse effect on fertility and reproduction in CD-1 mice with continuous administration for 18 weeks, and had no adverse effect on the reproductive performance of their offspring.

XIII. BIODEGRADABILITY AND ENVIRONMENTAL TOXICITY INFORMATION

Biodegradability:

Simple Green® is readily decomposed by naturally occurring microorganisms. The biological oxygen demand (BOD), as a percentage of the chemical oxygen demand (COD), after 4, 7, and 11 days was 56%, 60%, and 70%, respectively. Per OECD Closed Bottle Test, Simple Green® meets OECD and EPA recommendations for ready biodegradability. In a standard biodegradation test with soils from three different countries, Butyl Cellosolve reached 50% degradation in 6 to 23 days, depending upon soil type, and exceeded the rate of degradation for glucose which was used as a control for comparison.

Environmental Toxicity Information:

Mud Snail (Potamopyrgus estuarinus)

Simple Green® is considered practically non-toxic per EPA's aquatic toxicity scale. Simple Green® is non-lethal to any of the marine and estuarine test animals listed in the following table at concentrations below 200 mg/L (0.02%). This table shows the Simple Green® concentrations that are likely to be lethal to 50% of the exposed organisms.

	<u>LC_{so} in mg/L (ppm)</u>			
	48-hour	96-hour		
Marine Fish:				
Mud minnow (Fundulus heteroclitus)	1690	1574		
Whitebait (Galaxias maculatus)	210	210 .		
Marine/Estuarine Invertebrates:				
Brine Shrimp (Artemia salina)	610	399		
Grass Shrimp (Palaemonetes pugio)	270	220		
Green-lipped Mussel (Perna canaliculus)	220	220		

XIV. DISPOSAL CONSIDERATIONS

410

350

Simple Green® is fully water soluble and biodegradable and will not harm sewage-treatment microorganisms if disposal by sewer or drain is necessary. Dispose of in accordance with all applicable local, state, and federal laws.

Containers: Simple Green® residues can be completely removed by rinsing with water; the container may be recycled or applied to other uses. Electrical Wiring Compatibility: Polyimide insulated wiring is not affected by exposure to Simple Green®. After immersion in Simple Green® for 14 days at 74°F, the 61 cm piece of polyimide insulated wire passed a one minute dielectric proof test at 2500 volts (ASTM D-149). Contact Point: Sunshine Makers, Inc., Research and Development Division: 562-795-6000.

*** NOTICE ***

All information appearing herein is based upon data obtained by the manufacturer and recognized technical sources. Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of this information, Sunshine Makers, Inc. or its distributors extends no warranties, makes no representations and assumes no responsibility as to the suitability of such information for application to purchaser's intended purposes or for consequences of its use.

CHURCH & DWIGHT CO., INC.

469 NORTH HARRISON STREET 469 NOH I H DANIE PHONE (509) 683-5900 PRINCETON, NJ 08543

MATERIAL SAFETY DATA SHEET

MSDS NUMBER: MSDS-955L

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EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: None required under normal use conditions. If mists are generated, wear a NIOSH approved respirator.

PROTECTIVE GLOVES: Impermeable gloves recommended to prevent skin contact during use or for cleaning up spills.

EYE PROTECTION: Chemical splash goggles are recommended when handling or working with solution, or for cleaning up spills. Goggles and face shield are recommended if splashing of solution cannot be

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Impermeable apron where splashing of solution cannot be avoided.

VENTILATION: No special requirements unless mists are generated, then use local exhaust ventilation.

PROTECTIVE WORK/HYGIENIC PRACTICES: No special requirements with respect to chemical exposure other than those noted above. Specific requirements with respect to equipment and specific applications are the responsibility of the user.

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Light amber hazy liquid

ODOR: Slight/mild

PHYSICAL STATE: Liquid

pH AS IS: 10.9

VAPOR PRESSURE: N/A BOILING POINT: 100-110°C FREEZING POINT: -10°C - 0°C SOLUBILITY IN WATER: Complete

SPECIFIC GRAVITY (Water = 1): Approximately 1.07 @ 25°C

APPARENT DENSITY: 8.9 lbs/gal @ 25°C

SURFACE TENSION: 35 dynes

VISCOSITY: < 100 cp

% VOLATILE: Approximately 83% as water VOLATILE ORGANIC COMPOUNDS: None

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

CONDITIONS TO AVOID: Acids

INCOMPATIBILITY WITH OTHER MATERIALS: Reacts with acids to release carbon dioxide.

HAZARDOUS DECOMPOSITION PRODUCTS: May produce carbon monoxide, carbon dioxide, and fumes of SO_x and NO_x.

HAZARDOUS POLYMERIZATION: Will not occur.

CHURCH & DWIGHT CO., INC.

469 NORTH HARRISON STREET FHONE (809) 683-5900

PRINCETON, NJ 08543-52

CABLE ADDRESS: CHUROWIGI

MATERIAL SAFETY DATA SHEET

MSDS NUMBER: MSDS-955L

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11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: No specific data available. Tests on similar formulations indicate that mild to moderate irritation is possible. These effects are minimized and reversible with immediate treatment. Corneal involvement or visual impairment are not expected.

SKIN EFFECTS: No specific data available. Not considered a primary skin irritant based on testing of a similar formulation. May be irritating to humans under conditions of repeated or prolonged contact. Irritant reffect would not be expected to result in skin damage.

ACUTE ORAL EFFECTS: No specific data available. Similar formulations have been shown to be non-toxic with an LD_{so} > 5000 mg/kg.

INHALATION EFFECTS: No data available. May cause irritation to upper respiratory tract if inhaled as a mist. Irritation would be expected to be transient with no permanent damage.

DISPOSAL CONSIDERATIONS 12.

Dispose of spilled or waste product and other large amounts in accordance with all local, state and federal environmental regulations. State and local regulations may differ from Federal. Be sure to consult with appropriate agencies for specific rules. Depending on size, empty containers may be rinsed thoroughly and either discard in trash, recycled, or disposed of in licensed facility in accordance with existing local regulations and programs.

13. TRANSPORTATION INFORMATION

D.O.T. SHIPPING NAME: Not regulated

TECHNICAL SHIPPING NAME: Aqueous Cleaning Solution

D.O.T. HAZARD CLASS: None

U.N./N.A. NUMBER: None

HAZARDOUS SUBSTANCE/RQ: None

D.O.T. LABEL: None D.O.T. PLACARD: None

14. REGULATORY INFORMATION

<u>OSHA</u>

This product has been assessed as nonhazardous under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

TSCA

The ingredients in this product are reported in the U.S. EPA TSCA Inventory.

01-82 02:10 m LYOM CUNKOU & DAILAUT

469 NORTH HARRISON STREET PHONE (609) 5E3-5900

MATERIAL SAFETY DATA SHEET

MSDS NUMBER: MSDS-955L

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15. MSDS REVISION SUMMARY

Revised Sections 2, 3, and 9. Changed title of Section 14 from Additional Information to Regulatory Information, and added Section 15.

SUPERSEDES DATE: 11/20/95

CHURCH & DWIGHT CO., INC.

This Product Salety Data Sheet is offered solely for your information, consideration and invostigation

 ${\rm mg/m}^3$

Oakite MATERIAL SAFETY DATA SHEET

PRODUCT CODE: 0310 OAKITE 31 200-290-018

EMERGENCY TELEPHONE NUMBER:

(800) 424-9300 (CHEMTREC)

HMIS 3 0 0 J

SECTION I - PRODUCT IDENTIFICATION

CHEMICAL NAME

TRADE NAME

AND SYNONYMS

MANUFACTURER'S NAME

AND TELEPHONE NO.

ADDRESS

NA-Mixture

OAKITE 31

OAKITE PRODUCTS INC. (908) 464-6900 (8am-5pm)

A Member of The CHEMETALL Group

50 Valley Road Berkeley Heights NJ 07922

DATE OF PREPARATION

05-26-99

SECTION II - HAZARDOUS INGREDIENTS

ACGIH OSHA CAS NO. & BY WI TLV PEL UNITS (TWA) (TWA)

Phosphoric acid (+) Trade secret registry (735517) Non-hazardous ingredients

0,007664382 50-60 1 -5097P 1-5 NEBal.

Unidentified ingredients are considered not hazardous under Federal Hazard Communication Standard (29CFR 1910.1200).

All components of this material are on the US TSCA Inventory.

CARCINOGENICITY: No substance in this product is listed by IARC, NTP, or regulated by OSHA as a carcinogen.

SECTION III - PHYSICAL DATA

BOILING POINT (F) >212 VAPOR PRESSURE (mm Hg) <18 VAPOR DENSITY (Air=1) <1

SOLUBILITY IN WATER Complete

EVAPORATION RATE (Water=1) 1

SPECIFIC GRAVITY (H20=1)

Bulk Density

11.34 lb/gal

PERCENT VOLATILE

BY WEIGHT(%) Excludes H2O

PH

1.360

INGESTION:

Х

0310

MATERIAL SAFETY DATA SHEET

APPEARANCE AND ODOR

Translucent, PH (concentrate) water-white liquid; slight, pleasant odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used): None

FLAMMABLE LIMITS: LEL: NA UEL: NA

EXTINGUISHING MEDIA: Use media suitable for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES: Wear Self-Contained Breathing Apparatus

(SCBA).

UNUSUAL FIRE AND EXPLOSION HAZARDS: See Section VII. (WHMIS)

See Section VI. (U.S.)

SKIN:

SECTION V - TOXICOLOGICAL PROPERTIES/HEALTH HAZARD INFORT

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

INHALATION:

SYMPTOMS/EFFECTS OF OVEREXPOSURE:

ROUTE(S) OF ENTRY:

Inhalation of mist may cause respiratory irritation with coughing, sneezing, salivation and difficult breathing. Severe exposures may lead to chemical pneumonitis. Eye contact causes severe or permanent damage. Skin irritation or severe burns; BURNING SENSATION MAY BE DELAYED.

FIRST AID

Immediately flush eyes with plenty of water for at least 15 minutes EYES:

while holding eyelids open. Get prompt medical attention.

Immediately remove contaminated clothing. Wash skin with large SKIN: amounts of water for at least 15 minutes. Get prompt medical

attention. Wash clothing before reuse.

Contact local poison control center or physician IMMEDIATELY! INGESTION:

Move victim to fresh air and restore breathing if necessary. Stay INHALATION:

with victim until emergency medical help arrives.

0310

Oakite MATERIAL SAFETY DATA SHEET

SECTION VI - FIRST AID

STABILITY: NORMALLY STABLE

INCOMPATIBLE MATERIALS: Alkalies. Contact with certain metals may yield

explosive hydrogen gas.

HAZARDOUS DECOMPOSITION PRODUCTS: Phosphorous oxides.

SECTION VII - REACTIVITY DATA

SPILL OR Wear personal protective equipment (See Section VIII).

LEAK PROCEDURES:

Contain spill, add soda ash or lime, and place in poly-lined drums

for disposal.

WASTE DISPOSAL METHOD: Dispose of in accordance with Local State and Federal

regulations.

section viii - preventative measures

RESPIRATORY: If TLV is e

If TLV is exceeded, or For symptoms of overexposure, wear a

NIOSH-approved dust/mist respirator.

EYEWEAR:

Wear chemical safety goggles. If splash potential exists wear

chemical splash goggles or faceshield.

CLOTHING/GLOVES:

If potential for skin contact exists, wear neoprene or other

chemical resistant gloves and apron or coveralls and/or foot

coverings, as needed.

VENTILATION:

Local exhaust may be necessary for some handling/use

conditions. Specific needs should be addressed by

supervisory or health/safety personnel.

SECTION IX - STORAGE REQUIREMENTS/ADDITIONAL INFORMATION

SECTION IA - STORAGE REQUIREMENTS/ADDITIONAL INFORMATION

CORROSIVE. Store in closed container in cool well-ventilated area. NOTE:IF DILUTING (OR DISSOLVING) ALWAYS ADD THIS PRODUCT TO WATER SLOWLY AND WITH CONSTANT STIRRING.

0310

Oakite.

MATERIAL SAFETY DATA SHEET

APPROVAL: Michael Chang

Mgr.Health & Environmental Dept.

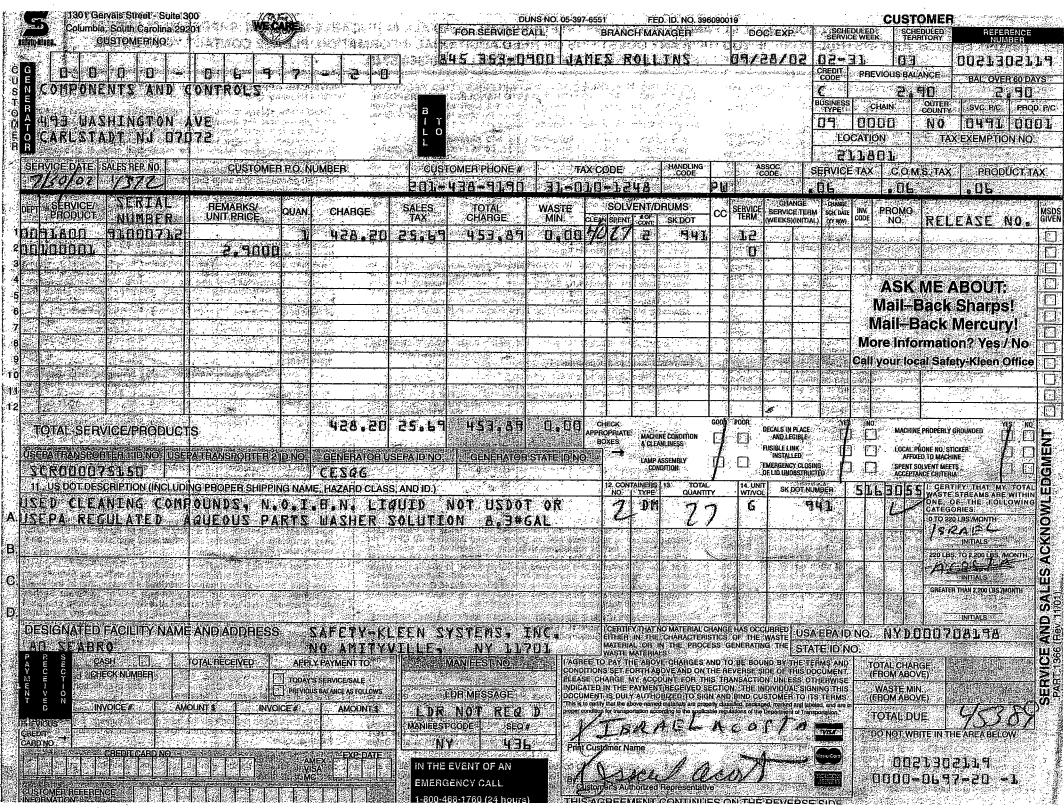
05/27/1999

NAME

TITLE

DATE OF PRINTING

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ж523**б**8-R3076

SAFETY-KLEEN SYSTEMS, INC.

RUN DATE: 10/29/02

PAGE:

211.801

GENERATOR WASTE REPORT

CUSTCMER #: 0000069720

DO NOT USE AS SOLE SOURCE FOR REPORTING PURPOSES
ONLY WASTE RECEIVED BY S-K IS IN THIS REPORT

REG BY SVC FROM: 01/01/01 SVC THRU: 09/30/02 REG BY: BRN4TOB NACLERIO, DENISE A CARLSTADT NJ 07072 GENERATOR: 0000069720 CEISGG COMPONENTS AND CONTROLS 493 WASHINGTON AVE SK LOC/FED EPA ID/STATE EPA ID

DESIGNATED FACILITY NAME/ADDRESS 0000941 USED CLEANING COMPOUNDS, N. O. I. B. N. NONE 1,643.4000 FACILITY SUMMARY = 1,643.4000 QOOQ941 USED CLEANING COMPOUNDS, N. O. I. B. N. 1,643.4000 GENERATOR SUMMARY = NONE 1,643.4000 0000941 USED CLEANING COMPOUNDS: N. D. I. B. N. 1,643,4000 GRAND TOTAL = NONE 1,643,4000

SAFETY-KLEEN SYSTEMS, INC.

RUN DATE: 10/29/02

PAGE:

1

SVC FROM: 01/01/01 SVC THRU: 09/30/02

GENERATOR WASTE REPORT
CUSTOMER #: 0000069720

DO NOT USE AS SOLE SOURCE FOR REPORTING PURPOSES
ONLY WASTE RECEIVED BY S-K IS IN THIS REPORT

SELECT ID: 43
REP EMP NUM:
SEND/PRT LOC: 211.801
REG BY: ERN4TOB NACLERIO, DENISE,

GENERATOR: 0000069720 CESQG

COMPONENTS AND CONTROLS

493 WASHINGTON AVE

CARLSTADT

NJ 07072

DESIGNATED FACILITY NAME/ADDRESS

SK LOC/FED EPA ID/STATE EPA ID

SAFETY-KLEEN SYSTEMS, INC. BO SEABRO

2-118-08 NYD000708198

NO AMITYVILLE

NY 11.701

SVC DOC /	TRANSPRIR ID CDS TYP	#OF U	QUANITITY CD	SK-DOT	USDOT SHIPPING DESCRIPTION	MFST SK-TRACI CD NUMBER
03/16/01 0005906015	SCROODO75150 NONE DM	2 P	207. 5000		USED CLEANING COMPOUNDS, N. O. I. H. N. LIQUID (NOT USDOT OR USEPA REGULATED) AQUEOUS PARTS WASHER SOLUTION (8. 3#GA ST WST CD: FRM: 6/F SYS: / IL M/W CD: /	IDP
06/06/01 0017/679680	SCROODO75150 NONE DM	2 P	249, 0000	()000941	USED CLEANING COMPOUNDS, N. O. I. B. N. LIGUID (NOT USDOT OR USEPA REGULATED) AQUEOUS PARTS WASHER SOLUTION (8. 3#GA ST WST CD: FRM: G/F SYS: / IL M/W CD: /	DP L)
08/29/01 0018519786	SCROODO75150 NONE DM	2 P	232. 4000	0000941	USED CLEANING COMPOUNDS, N. O. I. B. N. LIQUID (NOT USDOT OR USEPA REGULATED) AQUEOUS PARTS WASHER SOLUTION (8. 3#GA ST WST CD: SRC: FRM: G/F SYS: / IL M/W CD: /	IDP .
11/21/01 0019309698	SCROODO75150 NDNE DM	2 P	249. 0000	0000941	USED CLEANING COMPOUNDS, N. O. I. B. N. LIQUID (NOT USDOT OR USEPA REGULATED) AQUEOUS PARTS WASHER SOLUTION (S. 3#GA ST WST CD: FRM: G/F SYS: / IL M/W CD: /	IDP
02/18/02 0020005055	SCROODO751/50 NONE DM	3 P	265. 6000	()000941	USED CLEANING COMPOUNDS, N. O. I. B. N. LIQUID (NOT USDOT OR USEPA REGULATED) AQUEOUS PARTS WASHER SOLUTION (8. 3#GA ST WST CD: FRM: G/F SYS: / IL M/W CD: /	L)
05/06/02: 0020687926	SCROODO75150 NONE DM	2 P	215. 8000	()000941	USED CLEANING COMPOUNDS, N. O. I. B. N. LIQUID (NOT USDOT OR USEPA REGULATED) AQUEOUS PARTS WASHER SOLUTION (S. 3#GAST WST CD: FRM: G/F SYS: / IL M/W CD: /	DP L)
07/30/02 0021302119	SCROODO75150 NONE DM	2 P	224. 1000	()000941	USED CLEANING COMPOUNDS, N. D. I. B. N. LIGUID (NOT USDOT OR USEPA REGULATED) AQUEOUS PARTS WASHER SOLUTION (8). 3#GA ST WST CD: SRC: FRM: G/F SYS: / IL M/W CI): /	DP L)